CALIFORNIA COASTAL COMMISSION

45 FREMONT, SUITE 2000 SAN FRANCISCO, CA 94105-2219 VOICE AND TDD (415) 904-5200 FAX (415) 904-5400

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Commission Vote:



STAFF RECOMMENDATION: APPEAL SUBSTANTIAL ISSUE

Local Government: San Luis Obispo County

Decision: Unocal Guadalupe Remediation and Abandonment Project (Phase I:

Consists of six stages starting in 1998 and ending in 2003) D890558D

Appeal No.: A3–98–91

Project Applicant: Unocal Corporation

Location: The Guadalupe Oil Field site is located on the central coast of

California approximately 15 miles south of the city of San Luis Obispo. It covers approximately 2,700 acres within the Guadalupe—Nipomo Dunes system. Most of the lease is within San Luis Obispo County, though a small portion extends into Santa Barbara County along the southern boundary. The City of Guadalupe is located approximately three miles east of the site, Nipomo is approximately five miles to the northeast, and Santa Maria is approximately ten miles to the east. The site is bounded by the Pacific Ocean on the western side and the Santa Maria River and estuary/lagoon system on the southern side. The Guadalupe Field includes valuable dune habitat, wetlands, fresh water marshes and ponds, rare, threatened and endangered plants and animals, sandy beach, and the Santa Maria

River. (See Exhibit I — Site Map.)

This November 20, 1998, Staff recommendation includes *only* the Executive Summary, site map, and the recommended changes to the County's permit conditions.

Project Description:

Phase I: Field-wide remediation of contaminated soil and groundwater using a variety of proposed technologies (installation of temporary sheetpile walls, dual-pump phase recovery, excavation, biosparging, groundwater extraction, land farm bioremediation) and abandonment of oil field-related facilities. Project is based on the Regional Water Quality Control Board Cleanup or Abatement Order No. 98-38 (CAO-98-38) with July 1998 and October 1998 amendments.

Staff Note 1: To date, 90 diluent plumes have been identified within the Guadalupe Field. The Phase I project covers the 17 plumes identified by the Regional Water Quality Control Board (RWQCB) to be the greatest threat to surface waters. The entire Guadalupe Field is in the coastal zone. The majority of the field is covered by San Luis Obispo County's certified LCP. The Commission's original permit jurisdiction covers $2\frac{1}{2}$ of the Phase I plumes. Unocal's project schedule calls for beginning work on these $2\frac{1}{2}$ plumes in the Fall of 1999. The coastal permit application will be considered by the Commission in early 1999 and should therefore, not interfere with the schedule. The RWQCB is requiring continuing site characterization for the remaining 73 plumes and approximately 150 sumps and "will consider subsequent orders to cover subsequent phases of remediation." (CAO No. 98-38 No. 27).

Staff Note 2: There has been some confusion about what is before the Commission on this appeal. It is important to make clear that Settlement Agreement NOCV75194 and claims under anti-pollution laws of the State are <u>not</u> before the Commission. The Commission was <u>not</u> and is <u>not</u> a party to that settlement and is not being asked to express any opinion on the merits of that settlement. The settlement is simply not part of the Commission's deliberations on this appeal and in no way constrains the Commission's jurisdiction.

Appellants: Coastal Commissioners Areias and Wan

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EXECUTIVE SUMMARY

STAFF RECOMMENDATION

The staff believes that the appeal of Coastal Commissioners Areias and Wan regarding the Unocal Guadalupe Remediation and Abandonment Project Coastal Development Permit D890558D for remediation and restoration of the Guadalupe Oil Field raises SUBSTANTIAL ISSUE under the County of San Luis Obispo's certified local coastal program. On November 4, 1998, the Commission opened the substantial issue hearing and continued the hearing open until December. The purpose of deferring a decision on substantial issue was to give the staff the time to work co-operatively with Unocal and San Luis Obispo County and the Regional Water Quality Control Board to develop a package of recommended conditions/revisions to address Coastal Act and LCP issues.

The staff has worked collaboratively with San Luis Obispo County and the Regional Water Quality Control Board to make comprehensive changes to the County's permit package. It is the Commission staff's position that the recommended revised condition package now meets the standards of the San Luis Obispo County LCP and the Coastal Act. Because of the mailing deadline San Luis Obispo County and Unocal haven't had adequate time to review the final wording in this recommended package. Therefore, staff anticipates that we will make small refinements and prepare a limited addendum to be distributed at the Commission meeting.

The staff recommends that the Commission; (1) take public testimony on the recommended revised package of County permit conditions; (2) make any desired changes to the conditions; and (3) ask the County to adopt the revised conditions. If the County makes all the recommended revisions and issues a new permit that Unocal accepts, staff recommends that the appeal be dropped.

HOW PROJECT QUALIFIES AS APPEALABLE UNDER THE COASTAL ACT

This appeal was filed under Coastal Act Section 30603(a)(1,2,5), which allows appeals for development (i) located between the sea and the first public road paralleling the sea or within 300 feet of the inland extent of any beach or of the mean high tideline of the sea where there is no beach, whichever is the greater distance, or (ii) located within 100 feet of any wetland, estuary, or stream, or (iii) which constitutes a major public works project or a major energy facility.

ISSUE BEFORE THE COASTAL COMMISSION AT ITS DECEMBER 8, 1998, "NO SUBSTANTIAL ISSUE"/"SUBSTANTIAL ISSUE HEARING"

The issue before the Coastal Commission at this stage is defined by the Coastal Act as follows: Does a substantial issue exist as to conformity of the proposed development with the applicable certified local coastal program? The Commission's appeal regulations state that "Unless the Commission finds that the appeal raises no significant question as to conformity with the certified local coastal program ... the Commission shall consider the application de novo ..." (*Title 14, California Code of Regulations, Section 13115*)

CLEANUP OR ABATEMENT ORDER NO. 98-38

On April 3, 1998, the Central Coastal Regional Water Quality Control Board (RWQCB) issued a Cleanup or Abatement Order (CAO 98-38) requiring Unocal to remediate and abandon the Guadalupe Oil Field using various technologies. The order was amended on July 13, 1998 and November 6, 1998. The RWQCB decided to take a phased approach to remediation and abandonment, proceeding with cleanup of the 17 most critical plumes (those known to be introducing contamination to surface waters) while still continuing with investigations into the total extent of the contamination. Two and one-half of these plumes are located in the Commission's original permit jurisdiction and will be covered by a later coastal permit application. The CAO requires Unocal to begin the remediation project no later than December 31, 1998. (Exhibit II)

UNIQUENESS OF THE GUADALUPE/NIPOMO DUNES AREA

The Guadalupe Oil Field is located within the Nipomo Dunes complex, which extends from the Pismo Beach area in southern San Luis Obispo County to Mussel Rock in northern Santa Barbara County. The ecological significance of this dune-wetland system has been well established and documented in a wide range of reports and planning documents. In a review prepared for the Nature Conservancy, the Nipomo Dunes System was characterized as the largest, most scenic and most ecologically diverse of the coastal dune-wetland complexes in California.

In support of its designation as a National Natural Landmark, the Department of the Interior described the area's significance as follows:

The Nipomo Dunes—Point Sal Coastal Area contains the largest, relatively undisturbed coastal dune tract in California. Five major plant communities are well represented and the flora exhibits the highest rate of endemism of any dune area in western North America. Dune succession is exceptionally well displayed. No comparable area on the Pacific Coast possesses a similar series of freshwater

lagoons and lakes so well preserved, with minimal cultural intrusions and harboring such great species diversity. The area serves as habitat for both rare and endangered plants and animals besides being one of the most scenically attractive areas in southern California.

The area supports many federally-listed, state-listed and proposed threatened or endangered species. These include (but are certainly not limited to) the La Graciosa thistle, beach spectacle-pod, California brown pelican, western snowy plover, American peregrine falcon, tidewater goby, steelhead, California red-legged frog, the southwestern willow flycatcher and Least Bell's vireo. The dune, wetland, estuarine and riparian habitats within the project area provide critical habitat, food, resting, breeding and nursery habitat for many of these species. Coastal and offshore marine waters provide both seasonal and year-round habitat and resources for countless marine invertebrates, fish, birds and mammals, and support commercially and recreationally important fisheries. The area as a whole, in addition to supporting past fishing and oil development activities, has also been a popular recreation destination. There is public access at Oso Flaco Lake Natural Area two miles to the north, and at Rancho Guadalupe County Park just south of the Guadalupe Oil Field.

HISTORY OF OIL PRODUCTION AT GUADALUPE

The Guadalupe Oil Field site is part of the Unocal LeRoy Lease which covers approximately 2,700 acres within the Nipomo Dunes system. Most of the lease is within San Luis Obispo County, though a small portion extends into Santa Barbara County along the southern boundary. The site is bounded on two sides by surface waters, the Pacific Ocean on the western side and the Santa Maria River and estuary/lagoon system on the southern side.

Oil exploration and production began on the Guadalupe site with the Sand Dune Oil Company in 1946. The field was purchased in 1948 by the Continental Oil Company, which completed the first commercial well. Continental oil completed five additional wells and shut down the field in 1949. Thornbury acquired the field and returned it to production in 1950, and expanded operations. Unocal acquired the lease to the Guadalupe oil field in 1950 and operated it until 1990, using "diluent" (a kerosene-like additive used to thin oil) to assist in the pipeline transportation of the heavy crude oil pumped from the field. During the time that diluent was used at the site, numerous leaks developed in the tanks and pipelines used to distribute it around the field. Over time, these leaks have led to serious contamination of the ground water below the site.

Diluent has accumulated in plumes at the water table in the dune sand aquifer (about 10-130' down, depending on location). The thickness of separate-phase diluent varies from thin visible sheens to as much as 6 feet in places. Locations with the greatest known thickness of separate phase diluent are the Diluent Tanks area, the 5X area, the Compressor Plant, and Tank Battery 9. The separate-phase diluent can act as a long-term source of contamination to the underlying

ground water. As the ground water passes through these areas, some of the diluent dissolves into the water and moves downstream with the ground water flow, generally from east to west. This has resulted in ground water contamination beneath much of the site, with a flux towards the ocean and the Santa Maria River.

There are also at least 150 "sumps." These sumps are concentrated areas of contamination consisting of drilling muds, heavy metals, and a variety of petroleum products.

SYNOPSIS OF EVENTS REGARDING CONTAMINATION AT THE GUADALUPE OIL FIELD

- <u>February 1990</u>. Diluent, a kerosene-type of product used to thin crude oil, is spotted on the beach. Unocal shuts down production throughout the field and notifies regulatory agencies. Use of diluent is subsequently suspended in future pumping activities.
- <u>July 1992/June 1993</u>. OSPR performs two warranted searches on Unocal offices.
- March 1994. Unocal pleads no contest to three criminal charges, including failing to report diluent leaks, and agrees to a \$1.5 million cash settlement. The state attorney general sues Unocal for unspecified damages.
- <u>1994 1998</u>: The Executive Director of the Coastal Commission issues four emergency permits to excavate and address the most severe, emergency actions to minimize discharge of oil into surface waters.
- <u>July 1996</u>. Unocal agrees to pay for an environmental impact report of its plan to clean up fouled the Guadalupe Oil Field. San Luis Obispo County oversees the preparation of the EIR.
- March 1998. Final Environmental Impact Report (FEIR) for Guadalupe Oil Field Remediation and Abandonment is certified by San Luis Obispo County.
- April 1998. The California Regional Water Quality Control Board (RWQCB) on April 3, 1998, issues Cleanup or Abatement Order (CAO) No. 98-38 (amended July 13, 1998), for the Unocal Guadalupe Oil Field. The RWQCB decides to take a phased approach to remediation and abandonment, proceeding with cleanup of the 17 most critical plumes (those known to be introducing contamination to surface waters) while still continuing with investigations into the total extent of the contamination.
- <u>July 1998</u>. The state Attorney General announces a \$43.8 million settlement with Unocal for oil pollution contamination that occurred at Unocal's Guadalupe oil field over the past 40 years. The Settlement Agreement includes the Department of Fish and Game (DFG), the Coastal Conservancy, and the Central Coast Regional Water Quality Control Board

(RWQCB). The Settlement Agreement covers damages for spill impacts, not mitigation for damages caused or to be caused by the clean-up. The Settlement Agreement *does not* constrain the Coastal Commission's regulatory authority in any way. (Note: Full text of Settlement Agreement was sent to Commission for October 1998 meeting.)

- <u>September 22, 1998</u>. The San Luis Obispo County Board of Supervisors approves a comprehensive coastal development permit for the Unocal Guadalupe Oil Field Remediation Project with 252 conditions.
- October 19, 1998. Commissioners Areias and Wan appeal the County's coastal permit as not fully addressing the policies of the certified LCP and the Coastal Act.

EXTENT OF CONTAMINATION

Assessment activities to characterize and delineate the underground hydrocarbons have been conducted at the site and it is Unocal's position that the diluent characterization in the Dune Sand Aquifer (DSA) is largely complete. As of November 17, 1998, characterization efforts have included the installation of 717 monitoring wells (78 are inactive). In addition, 2,235 soil borings, 345 hand augers, 375 cone penetrometer pushes, and 11,874 soil gas samples were obtained. The soil gas analyses were conducted over all hydrocarbon-bearing pipelines and historic tank settings to screen all potential diluent release sources.

In addition to characterizing the DSA, the RWQCB has required Unocal to characterize any confining units that separate the DSA and the regional aquifers. Although this additional assessment work continues, results at this time indicate that the diluent has not affected the regional system.

Recently, Unocal conducted non-diluent constituent sampling and determined that Polichlorinated Biphenyls (PCBs) are associated with some of the diluent plumes. Initial characterization indicates that the remedial actions mandated by CAO 98-38 for the associated diluent plumes will not be affected. Unocal is conducting additional assessment efforts for non-diluent constituents at the direction of the RWQCB and will report the results as they become available.

Pilot studies have been conducted to test the effectiveness of various remediation methods. Under this pilot test program, 10 extraction wells are in operation at the 5X site.

CLEANUP ACTIONS TO DATE

A number of remedial activities have taken place at the Guadalupe Oil Field under emergency Coastal Development Permits issued by the County of San Luis Obispo ("County") or the California Coastal Commission ("Commission"). Follow-up permits for the emergency remedial

actions are to be included in regular Coastal Development Permits to be issued by the County or the Commission for their respective jurisdictions.

COUNTY		COASTAL COMMISSION
SLO P890275E	Installation of Bentonite Wall	CCC E-94-12 5X Beach Excavation Project
SLO P890275E (MODIFICATION 1)	Installation of PVC Barrier	CCC E-95-18-G Leroy 2 Sump Removal
SLO P890275E (MODIFICATION 2)	Installation of Fish & Game Wells	CCC E-97-03-G Sheetpile Wall
SLO 980275E (MODIFICATION 3)	Installation of Pilot Recovery System	CCC E-98-09-G A2A Excavation
SLO P890275E (MODIFICATION 4)	5X Excavation Support Facilities	
SLO P890275E (MODIFICATION 5)	5X Excavation Support Facilities	
SLO P890275E (MODIFICATION 6)	Installation of Monitoring Wells	
SLO P890275E (MODIFICATION 7)	Installation of Biosparging Wells	
SLO P970369E	7X Excavation	

SAN LUIS OBISPO COUNTY'S APPROVAL OF UNOCAL'S PROPOSED PROJECT

The County of San Luis Obispo issued Coastal Development Permit/Development Plan D890558D (September 22, 1998), with a total of 252 Conditions of Approval.

- Exhibit E <u>Past Remedial and Characterization Projects</u> **27 Conditions of Approval**
- Exhibit F <u>Phase I Remediation Projects</u>

 175 Conditions of Approval
- Exhibit G Oil Field Abandonment

 50 Conditions of Approval

The County's permit covers Phase I of the remediation activities (cleanup of 17 plumes), the project to be conducted in six stages from 1998 – 2003..

- Stage 1 Involves excavation of sites M4 and L11, and installation of biosparge and product recovery systems.
- Stage 2 Includes excavation of sites 5X (west and east) and A2A north.
- Stage 3 Includes excavation of site M2, B12, C12, and TB1 and associated sumps.
- Stage 4 Includes excavation of sites A5A and C8 (north and south). Following the excavation of sites C8, horizontal biosparge wells will be installed.
- Stage 5 Includes excavation of site B2-3 and, if needed, site N12.
- Stage 6 Includes excavation of sites C7 south and B6.

San Luis Obispo County has coastal development permit jurisdiction for 14½ of the Phase I sites; the Coastal Commission has original permit jurisdiction for 2½ Phase I sites (the entire 5X site, the entire A2A site, and half of the A5A site).

PORTION OF THE PROJECT WITHIN COMMISSION'S ORIGINAL PERMIT JURISDICTION

Unocal has submitted a coastal permit application to the Coastal Commission to cover:

- 1. Four emergency permits granted by the Executive Director since 1994;
- 2. Required cleanup of 2½ sites within the Commission's original permit jurisdiction (entire 5X site, entire A2A site, and half of A5A site); and
- 3. Request to retain the road improvements installed without a permit and subject to a pending violation.

The application is currently incomplete and hasn't been filed.

It would be preferable for the Commission to review the appeal and the permit application together. However, because the RWQCB Cleanup and Abatement Order require Unocal to begin cleanup of areas within the appeal area by December 31, 1998, staff decided to concentrate our efforts on the appeal now. We expect to schedule the Commission's coastal permit for February 1999. Commission action in February 1999 on those plumes located within its direct permit

jurisdiction will not slow down implementation of CAO No. 98-38; cleanup of those plumes located within the Commission's permit jurisdiction is not scheduled to begin until Fall 1999.

SUMMARY OF THE GROUNDS FOR APPEAL

The following discussion provides highlights of why the appeal raises a substantial issue.

I. Conformity with the San Luis Obispo County certified local coastal program (LCP) and Coastal Act public access, recreation policies, habitat preservation.

LCP policy sections 23.04.420 establish criteria for the requirement of public access that are not met by the conditions of this permit. The County adopted conditions of approval for the Unocal Guadalupe Project aimed at mitigating impacts to public access and recreation. For example, County Conditions 171 and 172 require Unocal to extend existing offers of dedication for lateral public access and conservation easements originally required in-part by a 1980 Coastal Commission permit (CDP409-24) "to at least 25 years after the issuance of a closure letter for the site by the RWQCB." It has already been almost 19 years since the OTDs were originally required and these OTDs have not been accepted by a public agency or private non-profit group because of the ongoing oil contamination. To be fully consistent with the public access components of the certified LCP and the Coastal Act Unocal must be required to include an indemnification with the OTDs so that they can be expeditiously accepted.

II. Conformity with the San Luis Obispo County certified LCP policy regarding habitat protection.

The County's conditions of approval include numerous requirements for habitat protection and restoration. These conditions are in many cases vague and inconsistent and lack performance standards to ensure that environmentally sensitive habitats are protected and/or restored. The conditions as now written do not provide the clarity and specificity required to conform to the sensitive resource area and environmentally sensitive habitat policies (23.07.160 and 23.07.170) policies of the certified LCP and the Coastal Act.

III. Other Coastal Resources Policies of the certified LCP and the Coastal Act.

The San Luis Obispo County certified LCP includes broad coastal resource policies that follow the Coastal Act. The Unocal permit includes conditions designed to address the extensive impacts that will occur as a result of this oil field remediation project. A number of the County's conditions lack the specificity, clarity, schedules, and performance standards necessary to ensure compliance with the LCP policies and the Coastal Act.

SUMMARY OF THE MAJOR CHANGES MADE TO THE COUNTY CONDITIONS

The County's original package of permit conditions included many of the important elements necessary to meet the LCP and Coastal Act, but lacked critical details and specificity. Commission staff worked collaboratively with the County, the Regional Water Quality Control Board, the Attorney General's office, and Unocal to revise the County's condition package to address all the issues raised in the appeal and to bring the permit conditions in compliance with the San Luis Obispo County certified LCP and the Coastal Act.

The complete set of revised conditions is attached. The changes include:

- Increased clarity and specificity on requirements and schedules.
- Performance standards for restoration of disturbed areas.
- Independent performance monitoring.
- Increased Coastal Commission oversight and involvement in review of remediation, abandonment and restoration activities.
- Processes to co-ordinate cleanup and restoration activities.
- A new Indemnity Agreement to eliminate oilfield-related liability for any agency or nonprofit group that will accept existing lateral access and conservation easements along the beach and for the field wide habitat easement.

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